# CANADIAN PACIFIC RAILWAY

#### - PART 2 - BROOKS TO BASSANO, ALBERTA -

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The Canadian Pacific Railway built the transcontinental main line across the dryland prairie east of Calgary in 1883. To attract settlers to farm the area, early in the 20<sup>th</sup> century the CPR built major irrigation works to render the land from Tilley to Calgary suitable for farming, such as the Bassano Dam seen above on 10 Oct 2009. The arrival of farm settlers mandated the construction of grain elevators throughout the area; this generated grain traffic for the railway. Today, grain, potash, chemical, intermodal, lumber and general merchandise dominate the railway traffic on the main line from Medicine Hat to Calgary, known as the Brooks Subdivision.

### **CPR SUBDIVISIONS 1883 – 2009** (1)



Except for the 46 miles between Gleichen & Shepard, which were replaced in 1914 with a 41-mile more southerly route, the CP main line has changed little since it was built in 1883; the branch lines that were built in the early part of the 20<sup>th</sup> century have virtually all disappeared 100 years later as have most of the traditional wood crib grain elevators and railway stations along those lines.

## **BROOKS SUBDIVISION 2009 TIME TABLE** <sup>(2)</sup>

Mile	2009	Notes
0.0	MEDICINE HAT	Division Point & yard
3.0	Cousins & Redcliff Spurs	Industrial spurs
6.8	Redcliff	Passing track and storage tracks
15.1	Bowell	Passing siding
25.8	Suffield	Passing siding plus storage tracks
35.3	Alderson	Originally named Langevin, Carlstadt
44.4	Kininvie	Passing siding
52.9	Tilley	Not in 2009 Time Table, storage tracks
54.5	Bantry	Passing siding
62.2	Monogram	Passing siding
66.8	Brooks	Not in 2009 Time Table, storage tracks
73.6	Cassils	Passing siding & small yard
89.8	Lathom	Passing siding & storage track
97.6	Bassano	Yard; wye; junction with Irricana Spur
105.3	Crowfoot	Passing siding
117.2	Cluny	Passing siding
124.7	Gleichen	Passing siding & storage track
139.0	Strangmuir	Passing siding & storage track
144.4	Carseland	Start double track; storage track
149.5	West Carseland	Double track; wye with small yard on spur
150.8	Bennett	Double Crossovers
153.7	Dalemead	End double track
158.8	Indus	Not in 2009 Time Table, storage track
165.6	Shepard	Start double track plus Intermodal Terminal
167.6	Murdoch	Double Crossovers
169.8	Glenmore	End double track
171.1	Ogden	Siding and major repair shops
173.3	Alyth	Major classification yard & engine terminal
174.5	12 <sup>th</sup> Street East	Tower; jct with Red Deer & MacLeod Subs.
175.8	CALGARY	Division Point & Terminal Tracks

Except for the section from Gleichen to Shepard, the time table for the Brooks Subdivision has not changed much since it was constructed in 1883. Some villages, such as Tilley, Brooks and Indus no longer appear but are still extant; Brooks for example became a city in 2005 with a population today of about 13,000. The railway has generally constructed passing sidings outside of the communities (Monogram, east of Brooks; Bantry, west of Tilley; West Carseland, west of Carseland) so as not to block level road crossings while trains wait for meets.

The passing sidings on the Brooks Subdivision range from 7,100 feet at Strangmuir to 8,300 feet at Bowell. At Kininvie and Gleichen, the sidings were extended to over 10,000 feet as part of CPR's 2005 Western Capacity Improvement program. Under the same program, the track from Carseland to Dalemead was double-tracked with double crossovers at Bennett; double track was extended from Shepard to Glenmore with double crossovers at Murdoch.

## M 63.1 – BROOKS AQUEDUCT



As we take one last look at Brooks and head further west, we see CPR SD40-2 # 5976 & CNR SD70M-2 # 8011, haul 70 manifest cars westbound through the inverted section of the 1914 Brooks Aqueduct at M 63.1 of the Brooks Subdivision on 10 Oct 2009.

## M 71 – BROOKS-CASSILS



The Bassano wayfreight with SD40-2 # 5866 and 13 cars has left the City of Brooks 2 miles behind and is 2 miles from Cassils as it heads west at a leisurely pace of 10 mph on 16 Oct 2009. It will go in the hole at Cassils for a meet with CP 8636 EAST manifest freight before it finishes its journey in Bassano. 16 Oct 2009



Cassils today (10 Oct 2009) has a small yard used for storage and a spur to serve the Viterra high throughput elevator built in 1998.<sup>(3)</sup> This was also the location of a spur line built 23 miles south to Kitsim, Rainier and Scandia in 1928, named the Cassils Subdivision.



The Viterra (a 1997-2007 amalgamation of the former Farmer's Cooperatives: Alberta Wheat Pool, Saskatchewan Wheat Pool, Manitoba Wheat Pool & United Grain Growers) elevator built in 1998 at Cassils.<sup>(3)</sup> This type of elevator was built in the era between the last wood crib elevator (blt 1985) and the 33 HTP concrete inland grain terminals that exist in Alberta today. Image: 10 Oct 2009.



The Bassano wayfreight with CP SD40-2 # 5866 and a 13 car consist waits in the hole at Cassils West; M 74.0, for a meet with CP 8636 EAST on 16 Oct 2009.



CP AC4400CW # 8636 and CP ES44AC # 8762 with a manifest freight have just passed the west switch, M 74.0, at Cassils for a meet with the Bassano wayfreight on 16 Oct 2009.

## M 73 – CASSILS SUBDIVISION



The abandoned embankment of the Cassils Subdivision, built in 1928 and abandoned in 1977, can still be seen in places, as at this location between Cassils and Kitsim. Image 10 Oct 2009.

## M 73 – CASSILS SUBDIVISION



An Alberta Historic Site, the Scandia grain elevator, built in 1927 by Alberta Pool Elevators, is all that remains on the Cassils Subdivision. There was at one time an Alberta Wheat Pool elevator at Rainier, also built in 1927 but not extant.<sup>(3)</sup> Image 06 Dec 2008



The Spinghill Lateral Canal near Cassils is part of the 2,800 miles of canals that carries irrigation water from the CPR built Bassano Dam to the farm fields in the Cassils-Millicent area; the initial canal system was also built by the CPR and has been upgraded over the years by the Eastern Irrigation District. Image taken 10 Oct 2009; flow in the system was turned off for the season on 09 Oct 2009.



Southeastern Alberta is classified as semi-arid, where evaporation can exceed natural precipitation. The land is only suitable for dryland farming (above) in years where there is sufficient rainfall, and rangeland. With the introduction of irrigation infra structure by the Canadian Pacific Railway in the early part of the 1900's, crop yields were increased three-fold and farming became sustainable.



The major irrigation system built in 1914 and subsequent years by the CPR allowed the semi-arid land in this region to become fertile by supplying water to flood the fields for grain growing; later pivot irrigation systems as seen here on 10 Oct 2009 west of Cassils became the norm. Today 247,000 acres of land are irrigated from the Bassano Dam, serving 1,200 farmers and a few villages.<sup>(4)</sup>

#### M 89 – LATHOM



A lonely bad order boxcar stands amidst the vastness of the dryland prairie in the back track at Lathom West, M 90.4 CPR Brooks Subdivision as the Bassano wayfreight continues on the last leg of its journey to Bassano. Lathom siding is 7,940 feet long; there was never a station or grain elevator at Lathom. <sup>(3)</sup> Image: 10 Oct 2009

#### M 89 – WEST OF LATHOM



CP 8784 (9765, 1st DPU 8717, 2nd DPU 8786) en-route with IMS Train 110-05 EAST from Vancouver IMS to Toronto-Vaughan (10,008 feet, 9,012 tons with 150 platforms, 308 containers); waiting west of Lathom at M 92.5 Brooks Subdivision on 06 Oct 2009 for an eastbound to enter Lathom siding as IMS 110-05 is too long for the 7,940 foot siding.

### M 89 – WEST OF LATHOM



On 06 Oct 2009, CP AC4400CW's # 9613 and # 8607 lead intermodal Train No. 199-04 (7,619 feet, 6,213 tons, 28 auto-racks, 67 IMS platforms) across the prairie 2 miles west of Lathom; at M 92.5 Brooks Subdivision. The train will terminate at Alyth, Calgary, AB., in another 4 ½ hours.



The CPR constructed the Bassano Dam between 1910 and 1914; the dam was opened by CPR President Thomas Shaughnessy. The dam raises the water level in the Bow River by 46 feet to allow diversion through the irrigation headworks to the right of the dam; the concrete section of the dam has 24 gates and is 720 ft long; the earthen section (left) is 7,000 feet long.<sup>(4)</sup> Image 10 Oct 2009.



The irrigation headworks on the Bassano Dam consists of 5 sluice gates built by the CPR (above) which can divert the raised water from the Bow River into the main outlet canal (right) to over 247,000 acres of farmland by gravity. The headworks can divert up to 3,500 cubic feet per second of water into the canal. <sup>(4)</sup> 18% of the water was directed to the Brooks Aqueduct. Image 10 Oct 2009



From the Bassano Dam headworks, which are 4 miles southwest of Bassano, the water flows through the main outlet canal (above 10 Oct 2009) to the 2,800 miles of irrigation canals & laterals in the Eastern Irrigation District. The excavated material from this canal was used to build the 7,000 foot long, 45 foot high, earthen embankment adjacent to the dam sluice gates to contain the Bow River.



The Bassano Station, used today by CPR MOW crews, is the only remaining wooden station building of the 13 permanent stations that existed at one time on the Brooks Subdivision. Bassano at one time was a division point; the 118 mile Bassano Subdivision (now abandoned) from Empress ended here and the 72 mile Irricana Subdivision (to be abandoned) started here. Image: 11 Jan 2009.



The Bassano wayfreight, westbound with SD40-2 # 5866 and 13 cars, has arrived at Bassano and is seen here on the passing siding waiting for the crew to throw the switch to back the train into Track 2 and tie it down for the night. The old (unused) water tower is seen above the gondolas, the station building is to the right of the last tank car. The 3 elevators once located here are now gone. <sup>(3)</sup>



CP Train No. 198, the daily priority IMS from Vancouver, BC., to Bensenville, Illinois, with CP AC4400CW's # 9562 and # 9664 as motive power, is eastbound on the main line at Bassano with 50 platforms and 37 general merchandise cars trailing on 16 Oct 2009.

**References:** 

- 1. CPR Brooks Subdivision Map Base from Atlas of Alberta Railways, University of Alberta Press 2005 <a href="http://railways-atlas.tapor.ualberta.ca/cocoon/atlas/">http://railways-atlas.tapor.ualberta.ca/cocoon/atlas/</a>
- 2. Canadian Trackside Guide, Bytown Railway Society, 1994 and 2008 Editions, http://www.bytownrailwaysociety.ca
- 3. All grain elevator construction and closing data from: Vanishing Sentinels, Jim Pearson, Delia, Alberta, 2007, available as a publication from Jim Pearson and at selected bookstores or at: <a href="http://web.mac.com/difdbs/Vanishing\_Sentinels/Home.html">http://web.mac.com/difdbs/Vanishing\_Sentinels/Home.html</a>; used with permission.
- 4. Eastern Irrigation District, Brooks, Alberta http://www.eid.ab.ca/Brochures.htm
- 5. All PART 2 digital images by the author 2007-2009